
A New Species of *Deprea* (Solanaceae) from Venezuela

Barbro Axelius

Botaniska Institutionen, Stockholms Universitet, S-106 91 Stockholm, Sweden

William G. D'Arcy

Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166, U.S.A.

ABSTRACT. The range of the genus *Deprea* is discussed, and a new species, *Deprea hirtiflora*, from Venezuela, is described and illustrated. An overlooked, second species, *Deprea granulosa*, is also presented and illustrated.

Deprea Rafinesque is a small neotropical genus of Solanaceae. Its separation from *Physalis* was long ignored after first publication (Rafinesque, 1838), but the genus was reinstated by D'Arcy (1973), who also lectotypified it by *D. orinocensis* (Humboldt & Bonpland) Rafinesque. This view has been accepted by Hunziker (1977) and Barbosa & Hunziker (1989). The genus now includes eight species: the type species, *D. xalapensis* (Humboldt & Bonpland) Rafinesque, *D. sylvarum* (Standley & Morton) Hunziker, *D. glabra* (Standley) Hunziker, *D. cardenasiana* Hunziker, *D. granulosa* (Miers) Barbosa & Hunziker, *Deprea subtriflora* (Miers) D'Arcy, and the species described here. D'Arcy (1979, 1986, 1993) has indicated that although the corolla is more deeply divided in *Physalis subtriflora* (the type species of *Larnax* Miers) than in other species now placed in *Deprea*, this species is actually a member of *Deprea* and hence *Deprea* and *Larnax* are congeneric.

A difficulty in assessing the geographic range of *Deprea* is in the provenance of the specimens on which the original two species were described. In his description of *Deprea*, Rafinesque included *Physalis xalapensis* Kunth and *Physalis orinocensis* Kunth, both of which are typified by quite similar specimens in Paris (P). Subsequently, no species of *Deprea* has been found in the region around Xalapa, Mexico (Nee, 1986), the ostensible source of *Physalis xalapensis*, nor was any specimen of *Deprea* encountered from the region of the Orinoco, Venezuela, by D'Arcy, Benitez, and Nee, who have recently completed a treatment of the Solanaceae for the *Flora of the Guayana Highlands*. It is therefore reasonable to assume that the Kunth material actually came from somewhere other than Mexico or Venezuela. Plants similar to the material at Paris used by Kunth are commonly found

in the uplands of Costa Rica and western Panama (D'Arcy, 1973), and also in Colombia.

After excluding Mexico and the Orinoco lowlands as part of the range of *Deprea*, the genus appears to range from Costa Rica to Colombia (*D. orinocensis*, *D. glabra*, *D. granulosa*), Ecuador (*D. glabra*), Peru (*D. subtriflora*), and Bolivia (*D. cardenasiana*). The species described here, *D. hirtiflora*, extends the range of the genus eastward into Trujillo, Venezuela, but not as far as the Orinoco basin.

Deprea hirtiflora Axelius & D'Arcy, sp. nov.

TYPE: Venezuela. Trujillo: Mpio. de Bocano, camino al Cerro Guaramacal via la laguna de "Los Cedros," cloud forest, 21 Mar. 1981, B. Stergios 2590 (holotype, MO). Figure 1A–C.

Species *Depreae orinicensi* (Kunth) Rafinesque affinis, a qua corolla azurea, extus dense villosa differt. Differt a *D. granulosa* (Miers) Barbosa & Hunziker colore corollae, pubescentia corollae densiore, tubo corollae brevior et antheris longioribus.

Branched, unarmed herb or shrub to 1.2 m tall, twigs terete, pubescent overall with conspicuous, weak, whitish 5–7-celled hairs that dry flattened, ribbonlike. Leaves subentire, ovate; blade mostly 3–5 × 1–3 cm wide, apically acuminate, basally obtuse, cuneate or acuminate, veins arcuate-ascending, ca. 5 on each side, not forming an evident submarginal vein, both sides evenly puberulent, slightly denser on the main veins beneath; petioles slender, 3–10 mm long. Inflorescences (1–3)-flowered fascicles terminal on peduncles in the leaf axils or branch forks, peduncle obsolete, pedicels slender, ca. 6 mm, puberulent. Flowers with fusiform buds; calyx pilose with elongate hairs, cupular, 5-lobate, lobed ¼-way down, the lobes small and narrowly triangular, ca. 0.5 mm long; corolla blue, tubular-infundibular, lobed ca. ⅓-way down, the lobes ca. 3 mm long, narrowly triangular, ciliolate, the tube ca. 5 mm long, slightly expanding upward, ca. 3 mm wide at the widest, villous outside, glabrous within;



Figure 1. A–C. *Deprea granulosa* (Miers) Hunziker & Barbosa. —A. Habit. —B. Flower. —C. Pubescence of leaf. After Zarucchi 5157 (MO). D–H. *Deprea hirtiflora* Axelius & D'Arcy. —D. Habit. —E. Flower. —F. Flower opened to show stamens and style. —G. Pubescence of leaf. —H. Fruiting calyx with hole made to show fruit. After Stergios 2590 (MO). Drawing by John Myers.

stamens 5, filaments inserted about $\frac{1}{3}$ -way up the corolla tube, slender, glabrous, anthers oblong, 2×0.8 mm, not apiculate; ovary rounded-conical, glabrous, style ca. 8 mm, slender, glabrous, stigma capitate. Fruit a globose berry, 5–9 mm; fruiting calyx subglobose, loosely enveloping the berry, open apically, 10-ribbed, overall pubescent; fruiting pedicels ca. 10 mm.

Deprea hirtiflora is only known from two collections made in páramo and cloud forest in upland Trujillo, Venezuela.

This species is distinctive in its dense pubescence of weak hairs that collapse on drying to appear flat and ribbonlike, and in its blue, ca. 5-mm-long corolla, which is densely hairy on the outside.

Paratype. VENEZUELA. TRUJILLO: Bocono, páramo Guaramacal, 2,640–2,700 m, $9^{\circ}13'N$, $70^{\circ}13'W$, 14 Mar. 1984, Luteyn & Cotton 9707 (MO).

In most species of *Deprea* corolla tubes are glabrous outside, and the corolla lobes sometimes have granular to pubescent margins. In two species, however, the newly described *D. hirtiflora* and *D. granulosa* (Fig. 1D–G), the corolla is conspicuously pubescent with coarse, simple hairs. In *D. hirtiflora*, the hairs are dense and elongate and the corolla tube has a furry appearance, while *Deprea granulosa* has sparse, scattered hairs on the corolla. The general appearance of trichomes is similar in both species.

Deprea hirtiflora is very similar to *D. granulosa*, both being branched, unarmed herbs with weak, whitish pubescence. The leaves of *D. granulosa* are somewhat bigger ($4\text{--}9 \times 3\text{--}5$ cm) than those in *D. hirtiflora*, it has longer petioles (8–20 mm), and its pedicels are longer (ca. 15 mm). The main differences are found in the flower: in *D. granulosa* the corolla is greenish yellow and much longer (8 mm

vs. 5 mm), the anthers are shorter (1.5 mm vs. 2 mm), and the filaments are inserted relatively higher in the corolla tube.

Deprea granulosa is also apparently a rare species, though it was reported (Escobar, 1989) to be abundant in the vicinity of Medellín, Colombia. For our comparisons, we have seen three collections of it: Colombia. “N. Grenada, locis frigidis inter Ibaque et Cartago,” Goudot s.n. (BM). Colombia. Antioquia: Mpio. de Medellín, Cerro del Padre Amaya, 8.4 km from Medellín–Santa Fe highway on road to the summit, $6^{\circ}16'N$, $75^{\circ}41'W$, 2,770 m, 30 Mar. 1987, Zarucchi 5157 (HUA, MO). Colombia. Antioquia: Mpio. de Urrao, páramo de Frontino, El Río, 3,115 m, 10 Oct. 1984, Ramira-Londono et al. 369 (MO). The first of these is an isotype of the species.

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